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Testing the Egg Shell Strength and Egg Shell Deformation by the FEST





For decades, the eggshell has been studied through a wide variety of methods for measuring eggshell strength like puncturing, crushing, pressure or dropping weights, etc.

Poultry scientists have concluded that a good quality eggshell should be able to resist a pressure of 30N or >.

Measuring <u>egg shell strength</u> (<u>destructive</u>) or <u>eggshell deformation</u> (<u>non-destructive</u>) at regular intervals in commercial egg production farms and broiler-and/or layer (grand)parent stock farms is an important aid to improve eggshell quality, e.g. by adjusting feed composition, in-house temperature, hygiene, reducing stress levels or processing and transportation of eggs.



Shell faults still create the greatest financial loss at commercial poultry farming level!

Poor egg shell quality costs the egg producer a lot of money and it is estimated that between 6 - 10% or even more (!!) is lost. It is also a well-known fact that keeping egg producing birds in other systems like free range and organic the losses are even bigger!

A simple but conservative calculation: 25.000 egg producing birds produce 8.750.000 eggs. Loss due to cracks, broken, etc: 5% = 437.500 eggs) x € 0,05 / egg (production cost) = an estimated € 21.875.00.

Reduce this loss by 1,5 till 2% and you save between € 6.500,00 and € 8.750,00 or even more! The introduction of an egg quality management program will be highly beneficial and the **R**eturn **O**n your **I**nvestment will be very quick!

The **FEST** is easy to use and allows a high operating speed. It can be used as a standalone device, in conjunction with a printer, a simple PC software or as part of the Egg Quality Assessment system.

The egg shell strength can be measured either on the egg's equator or the long side of the egg. The eggs are simply placed into the device and a single push of a button starts the measurement process. Usually the egg is broken without leaking albumen.

Please contact us for more information if you want to improve the profitability of your layer farms!



Technical Specifications:

Product: Futura Egg-Shell-Tester Ver. 2

Power supply: 12V DC, 0.7A, external power supply

Power consumption: about 9 Watt

Protection: IP40, protection against contact

Operating Temp.: 10 ° C to 45 ° C, Storage 0 to 60 ° C

Humidity: max. 90% non-condensing Dimensions: 300 x 100 x 130 mm (w, h, d)

Weight: 5.5 kg

Accessories: AC adapter (output 12V/1A, input 100-240V/50-60Hz)

manual carrying case

Optional: roll printer with data cable

data cable for PC adaptor RS232 to USB

software CD footswitch

calibration weight 1kg

Safety: This device fulfills the conditions of 2004/108/EC (Electromagnetic

Compatibility) and 2006/95/EC (Low Voltage) as amended by 93/68/EC (CE

marking).